FOREIGN POLICY REPORTS

December 1, 1937

Can Japan Be Quarantined?

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PUBLISHED TWICE A MONTH BY THE

Foreign Policy Association, Incorporated

EIGHT WEST FORTIETH STREET, NEW YORK, N. Y.

VOLUME XIII NUMBER 18 *25¢ a copy* *$5.00 a year*

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with the aid of the Research Staff of the Foreign Policy Association

JAPAN'S invasion of China has once more raised the question of imposing economic penalties against aggressor nations. Already a number of privately sponsored boycott movements against Japanese goods are under way in various countries. President Roosevelt has called for a "quarantine" of aggressors; and, now that the Nine-Power Conference at Brussels has reached an impasse, the participating governments may be compelled to decide whether or not they will attempt to check Japan by means of sanctions.

Thus the whole issue of economic sanctions, quiescent since the Italo-Ethiopian conflict, is once more keenly debated. While many people reject economic coercion in principle, even the protagonists of sanctions differ on the feasibility of invoking action against Japan. Some, disillusioned by the earlier failure of concerted economic measures against Italy, doubt the efficacy of similar action against such a strongly disciplined and determined nation as Japan. Others, however, are convinced that Japan has "feet of clay" and that its whole economic structure would soon crumble under outside pressure.

Japan has always depended to a large extent on foreign countries for its supplies. In 1934, imports provided about 16.6 per cent of the country's total demand for all types of movable goods, domestic and foreign.[1] In one respect, however, Japan is practically self-sufficient. With the aid of its colonies, it can still feed its own population. In 1936 net imports of foodstuffs amounted to only 110 million yen. Rice which constitutes the bulk of the Japanese diet, was supplied almost entirely from domestic sources—78.7 per cent from home production and 18.8 per cent from Korea and Formosa.[2] Fish, which takes the place of meat for the Japanese, also does not need to be imported, although the supply is dependent in part on continued access to Soviet waters in the Far East.[3] Beans, another important item, are procured from Manchoukuo; and the deficiency in sugar production is almost entirely covered by Formosa. Consumption and imports of meat and dairy products are relatively unimportant. Given the additional possibility of rationing the supply, it seems likely that Japan could do without foreign food.

Japan is most vulnerable with respect to its raw material supplies, fully one-quarter of which must come from foreign countries.[4] The country is deficient in almost all of what are termed the "great essentials" from the strategic point of view.[5] The one important exception is coal. Imports of this commodity, about half of which originate in Manchoukuo, amounted to only 6 per cent of domestic consumption in 1936. Moreover, *de facto* possession of North China with its coal fields should relieve any possible stringency, particularly in the supply of good coking coal. There is no way, however, of diminishing substantially Japan's growing dependence on foreign oil. In 1935 domestic production accounted for only two million of the twenty-two million barrels of petroleum consumed in the country.[6] The government is subsidizing attempts to extract oil from coal,[7] but these can hardly be expected to be very productive in the next few years.

In order to satisfy the needs of national defense and to make Japan a major industrial power, the government has actively encouraged the iron and steel industry. Production of pig iron and steel has soared, surpassing the 1929 level in the first half

1. Mitsubishi Economic Research Bureau, *Monthly Circular* (hereafter cited as *Monthly Circular*), October 1936, p. 13.

2. Cf. "Self-sufficiency in Agricultural Foodstuffs," *Monthly Circular*, cited, October 1937.

3. Freda Utley, *Japan's Feet of Clay* (New York, W. W. Norton & Co., 1937), p. 345.

4. Mitsubishi Economic Research Bureau, *Japanese Trade and Industry* (London, Macmillan, 1936), p. 493. According to other figures prepared by the same organization it would seem that Japan proper supplied in 1935 only 48.6 per cent of its requirements of minerals, agricultural raw materials and forestry products. Cf. *Monthly Circular*, cited, September 1937, p. 11.

5. Cf. Brooks Emeny, *The Strategy of Raw Materials* (New York, Macmillan, 1934).

6. "A National Fuel Policy for Japan," *Far Eastern Survey*, December 19, 1936.

7. *Ibid.*; also *Monthly Circular*, cited, July 1937, p. 24.

FOREIGN POLICY REPORTS, VOLUME XIII, NUMBER 18, DECEMBER 1, 1937

Published twice a month by the FOREIGN POLICY ASSOCIATION, Incorporated, 8 West 40th Street, New York, N. Y., U.S.A. RAYMOND LESLIE BUELL, *President;* WILLIAM T. STONE, *Vice President and Washington representative;* VERA MICHELES DEAN, *Editor;* HELEN TERRY, *Assistant Editor. Research Associates:* T. A. BISSON, VERA MICHELES DEAN, JAMES FREDERICK GREEN, HELEN H. MOORHEAD, DAVID H. POPPER, ONA K. D. RINGWOOD, PAUL B. TAYLOR, CHARLES A. THOMSON, JOHN C. DEWILDE. Subscription Rates: $5.00 a year; to F.P.A. members $3.00; single copies 25 cents. Entered as second-class matter on March 31, 1931 at the post office at New York, N. Y., under the Act of March 3, 1879.

of the current year by 113 and 176 per cent respectively.[8] Yet this tremendous increase has not basically modified Japan's dependence on imports, but merely shifted it from finished products to semi-finished goods and raw material. The country remains poor in iron ore, total known reserves in both Korea and Japan proper amounting to only 90 million tons, much of which is of poor grade. About two-thirds of iron ore requirements must accordingly be obtained abroad. In addition, about 55 per cent of the scrap iron is imported. Despite the rise in pig iron output, demand has been such that in 1936 foreign countries, exclusive of Manchoukuo, still furnished about 23 per cent of domestic requirements.[9] In steel Japan was practically self-sufficient in 1934 and 1935, but rearmament again necessitated substantial imports last year.

For a long time Japan imported most of its industrial machinery. With the development of domestic iron and steel production, however, the engineering industry also expanded rapidly.[10] In 1936 the value of machinery exports for the first time slightly exceeded that of imports. Although the country remains to some extent dependent on others for finer machinery and precision tools, imports could probably be shut off for a considerable time without great injury to industry.

The same is hardly true, however, of the metals essential to modern industry. Japan produces a considerable quantity of copper, but about 40 per cent is still imported. Of lead and tin requirements 90 and 70 per cent respectively are bought abroad. Half of the zinc is imported, or about 80 per cent, if imports of ore are taken into consideration. Despite the rapid rise in domestic production during recent years, foreign countries still supply about 60 per cent of Japan's aluminum consumption.[11] Japanese authorities are hopeful that the exploitation of reputedly extensive deposits of bauxite in the South Sea Islands may provide a sufficient domestic supply of the ore from which aluminum is manufactured.[12] In almost all of the important steel-alloy minerals the country is relatively poor. Although recent figures are lacking, imports probably account for more than half of the consumption of manganese which is absolutely essential in steel-making. Nickel and antimony are supplied almost entirely by foreign countries, and most of the molybdenum and tungsten must also be imported.[13] Self-sufficiency in chromium probably cannot be attained. Quicksilver, essential in the manufacture of explosives, is unobtainable at home.

As for raw materials of the chemical industry, Japan is fortunate in the possession of ample supplies of sulphur. It must import, however, more than half of its salt, which is needed for the manufacture of poison gas, caustic soda and other chemicals. Considerable quantities of phosphorite are also obtained abroad. Today home production supplies most of its requirements of heavy chemicals.[14] The output of ammonium sulphate, needed for munitions as well as fertilizer, suffices for normal consumption, and the production of caustic soda is also adequate. There is still an import surplus of superphosphates, a leading chemical manure, and of dyestuffs.[15]

With the exception of silk, the manufacture of textiles—which constitutes such a large proportion of Japan's industrial production—is almost wholly at the mercy of foreign countries. Japan grows no cotton and very little wool. Of the remaining textile raw materials, rayon pulp, hemp and other fibres, domestic output supplies only from 20 to 30 per cent of the demand.[16] Japan can supply about 80 per cent of the pulp for paper making, but almost all of the high grade sulphite pulp required in the manufacture of rayon and staple fibre is brought in from other countries. Among other essential raw materials, rubber supplies are entirely imported.

Equally striking is the extent to which Japan relies on exports. The proceeds of exports, of course, enable the country to import those commodities and materials without which its economy could not function. But independent of this consideration, Japanese agriculture and industry both have a substantial stake in the foreign market. About 2 million farm households, or 37 per cent of the total, supplement a precarious livelihood through sericulture and are thus dependent on the maintenance of silk exports.[17] Income from cocoons probably accounts for about a quarter of the receipts derived from the sale of agricultural prod-

8. The output of pig iron rose from a monthly average of 126,200 tons in 1929 to 268,700 tons in the first half of 1937; that of steel from 157,000 to 423,300 tons. Cf. *Monthly Circular*, cited, October 1937, p. 27.

9. "The Present Situation of the Japanese Iron and Steel Industry," *ibid.*, March 1937.

10. The value of machinery produced in Japan rose from ¥682,162,000 in 1929 to an estimated ¥1,580,000,000 in 1936. Cf. *ibid.*, June 1937, p. 25.

11. "Importance of the Pacific Area as a Source of Raw Materials," *ibid.*, September 1937.

12. *Far Eastern Survey*, August 17, 1937, pp. 198-99.

13. *Japanese Trade and Industry*, cited, pp. 74-75.

14. Harald von Waldheim, "The Rise of the Chemical Industries in Japan," *Far Eastern Survey*, September 6, 1936.

15. Cf. *Monthly Circular*, cited, March 1936, p. 18.

16. *Ibid.*, September 1937, p. 11.

17. *Japanese Trade and Industry*, cited, p. 164.

ucts. Many Japanese farmers also depend to some extent on the earnings of their daughters, who are frequently sent to labor in textile factories. For the last few years about 20 per cent of the value of Japanese industrial production has been exported.[18] In 1934 textiles accounted for 36.6 per cent of the industrial output and employed slightly over one million workers.[19] Foreign countries took one-third of the production. Seventy-two per cent of the raw silk, 60.3 per cent of the cotton tissues and 75.9 per cent of the rayon tissues were exported. A large proportion of ceramic products—21.7 per cent—also found markets abroad. The canning industry sells most of its output abroad. In fact, there are few industries in which exports do not take a large percentage of one or more products.

Nevertheless, many believe that sanctions or boycotts directed against Japan would be ineffective. They point to the League's experience with sanctions imposed on Italy. Here, too, was a country largely dependent on foreign markets and foreign sources of raw materials. To be sure, no attempt was made to cut Italy off completely from the outside world. The countries which applied sanctions from November 18, 1935 to July 16, 1936 accounted together for approximately 62 per cent of Italy's import and export trade. The prohibition on exports to Italy was confined to arms and ammunition, and to certain other articles the supply of which was controlled by League members, including rubber, iron ore and scrap, bauxite and aluminum, chronium, manganese, tin, tungsten, vanadium and titanium. By no means all raw materials were included, the most important omission being oil and gasoline. In order to cripple Italy's purchasing power abroad, there was a general undertaking not to buy anything from Italy and to ban all loans, credits or share issues for or on behalf of the public authorities or residents in Italy.

The results of these measures were generally disappointing. With strict government control Italian wholesale prices and the cost of living rose only about 5 per cent during the sanctions period. There was a considerable loss of gold, the gold and foreign exchange holdings of the Bank of Italy declining by 1941 million lire from October 1935 to December 1936.[20] Yet in the equivalent period preceding the application of sanctions, the loss was slightly larger, namely 2074 million lire. In fact, the absolute total of the import surplus during the sanctions period[21]—1411.1 million lire—was considerably smaller than that in the corresponding months of the preceding year—2033.4 million lire. If official Italian statistics are to be believed, exports declined only 3 per cent in value, and imports 8 per cent, from the levels prevailing in the year before. It should be noted, however, that incomplete figures assembled by the League of Nations are sharply at variance with Italian statistics and correspond much more closely to what one might expect. Thus statistics of 62 countries indicate that Italian imports had declined 42 per cent by January and 35 per cent by February 1936, while exports had dropped 48 and 56 per cent respectively.[22] They agree, however, that the total import surplus fell. Probably these figures are closer to the truth than the Italian trade statistics.

It is likely that the efficacy of sanctions was impaired by evasion and lax enforcement. Certain permissible exceptions to the prohibition on imports from Italy were evidently abused. The exemption of cargoes en route by November 18 and of goods sold under contracts on which full payment was made before October 19 probably accounted for the continued high level of Italian exports for the first two months of sanctions. In particular, import authorities found it difficult to determine whether payment had actually been made and in most cases apparently gave shippers the benefit of the doubt. The very fact that a number of countries in the vicinity of Italy refused to apply sanctions[23] facilitated illegal indirect trading, especially since certificates of origin could easily be falsified. Moreover, it was entirely permissible for League members to import Italian goods provided they had undergone some processing in other countries which had raised their value by more than 25 per cent. A number of countries subsequently informed the League that this 25 per cent minimum had proved too low and that the "processing" had in many cases been artificial.[24] The embargo on credits was also evaded; many exporters to Italy apparently accepted payment in blocked lire, which was in effect an extension of credit.

18. *Monthly Circular*, cited, October 1936, p. 15.

19. Department of Finance, *Financial and Economic Annual of Japan 1936*, p. 94. Probably a few hundred thousand additional workers were employed in the textile trades at home or in enterprises employing less than five workers and not qualifying as "factories."

20. In this calculation the figures for December 1936, which include the "profits" of revaluing the lira, have been reconverted into pre-devaluation lire.

21. Including both November 1935 and July 1936.

22. Compiled from figures in League of Nations, Co-ordination Committee, *Statistics of Trade with Italy and the Italian Colonies, December 1935-March 1936* (Geneva, June 2, 1936), p. 6.

23. Including Austria, Switzerland, Albania, Hungary and Germany.

24. Cf. in particular the French memorandum of August 29, 1936 and that of the Netherlands. League document C.L.216.-1936.II.A., Annex I and XIV.

The results of League action against Italy seem rather inconclusive, not only because the measures adopted contained many loopholes which could have been plugged, but also because Italy in some respects occupies a position different from that of Japan. First of all, although comparable data are lacking, Japan is probably somewhat more dependent on the outside world than Italy. The former's industrial economy revolves very largely around textiles and these in turn rely extensively on foreign markets. Italian exports are more evenly distributed among a large number of products and branches of industry, than those of Japan. For instance, textiles of all kinds made up 56.4 per cent of Japan's exports in 1934, as compared with only 30.6 per cent of Italy's sales.[25] It is also quite likely that Japan would have much greater difficulty in reducing imports. Being already self-sufficient as to food, it could not follow the Italian and German examples and drastically curtail imports of that character. Should its exports fall off, it would almost immediately have to reduce imports of more or less essential raw materials.

Secondly, Japanese foreign trade is much less evenly distributed than that of Italy. It would therefore take fewer countries to make economic sanctions effective. The United States and the British Empire together supply 63.2 per cent of Japan's imports and absorb 48.2 per cent of its exports, and if France and the Netherlands are added, the proportions become 68 and 56.5 per cent. Germany and Italy contribute only 5.1 per cent of Japan's requirements and take but 1.4 per cent of its foreign sales.[25a] The most important raw materials are furnished in whole or in large part by a few countries, primarily the British and Dutch Empires and the United States. The Netherlands East Indies and the United States supply the bulk of the mineral oil, with the British Empire and the Soviet Union contributing nearly all the remainder. Crude rubber is derived almost entirely from the Netherlands Indies, the British Empire and French Indo-China. Well over half of the pig iron imports come from the United States and the British Empire, and almost all of the scrap as well as other iron comes from the United States. Canada and the United States accounted for 80.5 per cent of the aluminum imports in 1936; the British Empire and the United States for 69.7 per cent of the lead and 84.4 per cent of the zinc; the United States alone for 96.8 per cent of the copper; and the British Empire for 72 per cent of the tin.[26] The United States supplied 39 and the British Empire 46.8 per cent of Japan's cotton imports, while 91.3 per cent of the wool came from British sources. The United States and Britain also furnished half of the machinery imports, and the United States 94 per cent of Japan's foreign purchases of automobiles and parts. Germany supplied a considerable portion only of ammonium sulphate, dyestuffs and machinery. To some extent, of course, Japan might develop alternative sources of supply.

How effective would be an embargo on shipments of raw materials to Japan? Such a measure would undoubtedly cause Japan much hardship, but its efficacy would be minimized by a number of factors. If the country's exports were at the same time subjected to an official or unofficial boycott, its needs of certain imported raw materials subsequently exported in manufactured form would decline sharply. This would be true, for example, of the textile raw materials—cotton, wool and wood pulp. In some cases it would be possible to effect economies in consumption, particularly for peaceful purposes. Thus the non-military use of nickel might be curtailed by a considerable percentage, and the consumption of tin, which is not a vital war necessity, might be drastically reduced.[27] More intensive exploitation of domestic resources might help to supplant imports partially. Japan could probably produce much more copper, especially under the stimulus of higher prices. Resort might also be had to more extensive regeneration of old rubber and collection and utilization of scrap metals. Production of synthetic fuel and staple fibre would very likely increase, although it would not weigh heavily in the balance for some time at least.

On the whole, measures to economize consumption and increase the domestic supply would be inadequate to prevent a serious shortage of vital raw materials unless large stocks had been accumulated before imposition of the embargo. In the opinion of some experts, this has actually been the case.[28] There is little evidence permitting an authoritative

25. League of Nations, *International Trade Statistics, 1935* (Geneva, 1936), pp. 163, 168.

25a. League of Nations, *International Trade Statistics, 1935*, cited, p. 166. China furnished 5.4 per cent and Manchoukuo and Mongolia 7.7 per cent of Japan's imports in 1935. They took respectively 6 and 5 per cent of the country's exports. The Soviet Union contributed but 0.7 per cent of its imports and absorbed 1.1 per cent of its sales abroad.

26. Percentages are calculated from statistics in the *Monthly Return of the Foreign Trade of Japan*, December 1936, issued by the Japanese Department of Finance.

27. Cf. Emeny, *The Strategy of Raw Materials*, cited, pp. 75, 85.

28. Thus a writer in *The Times* (London, September 8, 1937) intimates that Japan has accumulated ample supplies of scrap iron and that stocks of other essential metals like nickel, tungsten and tin will suffice for at least two years.

INDUSTRIAL PRODUCTION AND VOLUME OF IMPORTS

(Production indicated by indices: 1933=100
Imports in quantities of 100,000 kin=132,280 lbs.)

	1933	1934	1935	1936	7 mos. 1936	7 mos. 1937
Industrial production	100	108.8	121.2	130.0	125.5*	144.8*
Crude and heavy oil imports†	2,320	2,816	3,478	3,912	2,358	2,679
Other mineral oil imports†	520.3	637.8	696.6	730.6	388.5	435.9
Wood pulp imports	2,708	3,814	4,570	5,529	3,547‡	5,062‡
Crude rubber imports	1,165	1,197	995	1,065	646‡	907‡
Raw cotton imports	12,489	13,555	12,284	15,211	10,600‡	12,210‡
Raw wool imports	1,806	1,373	1,841	1,641	1,426‡	1,834‡
Output of producers' goods	100	113.2	127.3	137.7	133.8*	156.6*
Steel production	100	125.6	146.7	174.4	168.1*	206.6*
Ore imports	28,236	38,548	61,048	67,561	32,746	35,128
Of which iron ore	25,394	35,532	56,735	63,002	30,354	30,947
Iron imports excluding ore	35,967	41,417	53,280	49,530	24,927	41,127
Of which scrap or old iron	16,883	23,550	28,201	24,951	10,803	22,592
Nickel imports	54	44	57	43	22.6	59.6
Antimony imports	41.9	42.9	52.8	60	32.4	27.9
Copper imports	294	856	1,160	889	469	1,096
Lead imports	1,121	1,585	1,523	1,630	909	1,082
Zinc imports	542	553	764	1,030	461	636
Aluminum imports	121	170	223	171	158	88
Tin imports	58	68	73	77	36	78
Mercury imports	6.2	8.3	13.6	8.5	10.9	6.4

*Six months. †In 1000 kiloliters. ‡Eight months.

Compiled from statistics in *The Oriental Economist,* and *Monthly Return of the Foreign Trade of Japan.*

judgment on this question. On the whole, stocks appear to be abnormally large. At the end of July 1937, for example, port and mill supplies of raw cotton totaled 2,569,000 bales,[29] which compared with imports of 5,125,000 bales in the year 1936-1937. Although purchases have since been severely restricted, stocks on hand would probably cover domestic consumption for one year, and even longer if economies were practiced. Supplies of mineral oil are apparently sufficient for at least six months. The Petroleum Industry Law of June 22, 1934 required all oil companies to have such a supply on hand by October 1935; and the existence of special naval stocks adequate for one to two years is reported.

In the absence of more reliable statistics, the substantial rise in imports of raw materials over the last few years is usually regarded as convincing evidence that Japan must have laid in extensive stocks. While it is true that imports have increased rapidly, it must be remembered that at the same time there has been a veritable industrial boom in Japan which has consumed ever larger quantities of raw materials. A rough comparison between production indices and the volume of imports (see accompanying table) indicates that there may have been some, but not an extraordinary accumulation of stocks before 1937. During the current year, however, imports of raw materials have not only been running well in advance of 1936 in most cases, but in many instances the totals for the first seven or eight months have surpassed or approximated the amounts imported during the entire preceding year. This is true of wood pulp, wool, iron, nickel, copper and tin. Part of these imports must have gone into stocks. From these data one may hazard a conservative conclusion that the supply of most raw materials in Japan is sufficient for at least half a year. This judgment is bolstered by the supposition that the Japanese general staff must have been prudent enough to constitute stocks of raw materials vital in war, particularly those like nickel, antimony, mercury, lead and others, of which large quantities are not necessary. Thus an embargo on raw material exports to Japan would probably have to be maintained for a period of at least six months to a year before serious shortages would induce a breakdown of the country's economy and the military machine.

Independent of such an embargo it would be possible to limit seriously Japan's ability to buy essential raw materials abroad by boycotting its products. Even without a boycott the country is experiencing considerable difficulty in maintaining its present level of imports. The balance of trade for Japan and its possessions shows a grow-

29. "American Cotton Hit by Japanese Import Control," *Far Eastern Survey,* cited, November 5, 1937.

ing import surplus since 1935. The low value of the yen and the recovery of raw material prices has greatly enhanced the cost of goods bought abroad, while the industrial boom at home has necessitated the importation of ever larger quantities. At the same time the increase in export business has slackened, owing in part to the erection of trade barriers against Japanese products. Thus the import surplus of the Japanese Empire rose from ¥14,700,000 in 1935 to ¥135,081,000 in 1936, and in the first seven months of the current year aggregated ¥720,818,000 as compared with only ¥299,637,000 in the same period in 1936. Other items in Japan's balance of international payments have been inadequate to offset the growing trade deficit. Services for foreigners, including the transportation of freight, insurance receipts, tourist expenditure and the like, furnished the country with a net foreign exchange income of 144 million yen in 1934, 178 million in 1935, and 120 million in 1936. These receipts were more than offset, however, by a net drain of capital, particularly for investment in Manchoukuo, which took 183 million yen in 1934, 372 million in 1935, and 183 million in 1936.[30] This unfavorable balance of payments has put heavy pressure on the yen, particularly during the current year. To maintain the value of the currency, $210,600,000 in gold was shipped to the United States during the first ten months of 1937.

In an effort to correct the adverse balance of trade the government, on January 7, 1937, suddenly put into effect regulations requiring official permission before any foreign exchange could be obtained for payment of imports or letters of credit. Some measure of foreign exchange control had been in force since March 1933, but it had been directed primarily against the flight of capital and ordinary commercial business had not been impeded. Although the new regulations were at first expected to be temporary, an ordinance of July 7, 1937 not only continued the system, but widened its scope.[31] In addition, the special Diet which met early in September 1937 authorized the government to restrict or prohibit the importation of a long list of goods, and to regulate the distribution and consumption of such materials whenever their importation had actually been limited or forbidden.[32] Under an ordinance effective October 1, 1937 imports of many foodstuffs and beverages, primarily of a luxury type, and numerous manufactures have been prohibited. Others, including cotton, wool, camels' hair and lumber, have been placed under restriction.[33]

Any boycott of Japanese goods will therefore seriously aggravate the troubles which Japan is already experiencing. True, the country still has reserves which it can call into play so long as it is not completely cut off from access to foreign supplies. Loans and credits, to be sure, will hardly be obtainable, for even now Japan has difficulty in getting ordinary commercial credit abroad. But it does possess some foreign investments which it can mobilize and sell in foreign countries in order to pay for needed imports. In April 1937 Japanese holdings of investments in foreign currency totaled about 1,611 million yen.[34] Of this amount, however, at least 725 million consisted of Japanese government bonds originally issued abroad and since then repurchased by Japanese citizens.[35] Probably the remainder, some 886 million, could not be entirely marketed abroad but, considering the fact that these investments are still carried at the old valuation of the yen and are thus undervalued by about 65 per cent, they do represent a sizable reserve. In addition, Japan could rely on its gold reserves and its gold production. The gold holdings of the Bank of Japan were revalued late in August 1937. The Bank was left with reserves amounting to ¥801,000,000, and the government took over about ¥400,000,000 for the establishment of a Gold Fund Special Account to be used chiefly to maintain the value of the yen.[36] Every effort is also being made to stimulate domestic gold production. In 1935 the gold output in the Empire aggregated 34,189 kilograms[37] which represents approximately 118 million yen at the present official valuation. Unless, therefore, a boycott of Japanese goods were accompanied by a fairly effective prohibition on the shipment of raw materials, Japan would have sufficient resources to finance essential imports for quite some time.

If foreign trade were cut off in whole or in part, the resulting impairment of national income would seriously affect government finances. In the last few years Japan's financial resources have been severely strained by the heavy demands for industrial capital and the mounting budget expenditures and deficits incurred for the armed forces. Total disbursements rose steadily from 1,476.8 million

30. Cf. *The Oriental Economist*, January 1937, p. 22; also Elizabeth Boody, "Manchoukuo, the Key to Japan's Foreign Exchange Problem," *Far Eastern Survey*, May 12, 1937.

31. *Monthly Circular*, cited, August 1937, pp. 21-23.

32. *Ibid.*, October 1937, p. 14.

33. Cf. *The Trans-Pacific*, October 7, 1937, pp. 23, 24, 27.

34. *The Oriental Economist*, August 1937, pp. 445-46.

35. This was the total reported in September 1936; no figure is given for such holdings in April 1937.

36. Cf. *The Oriental Economist*, September 1937, p. 505.

37. *Monthly Circular*, cited, July 1937, p. 24.

yen in 1931-1932 to 2,282.2 million in 1936-1937, and appropriations for the army and navy advanced almost constantly at the expense of other departments. Arms expenditure composed 47.2 per cent of the 1936-1937 budget as compared with only 30.8 per cent five years before. The budget for the current fiscal year, which ends on March 31, 1938, originally amounted to only 2,892.8 million yen, but already 2,581.7 million more have been appropriated by the Diet to carry on the warfare in China.[38] Thus, at present, the government is absorbing about 40 per cent of Japan's national income. The public debt has risen from 6,188 million in March 1932 to 10,574 million in March 1937, and in the current fiscal year total bond issues of 3.4 billion yen will be necessary. Hitherto most of the government bonds have been taken over by the Bank of Japan which has then gradually turned them over to banks, insurance companies and private investors. The same procedure is employed in the present bond flotations, but even in Japan fear is expressed that such large issues can never be absorbed by savings alone.[39] Nevertheless, the experience of most countries during the World War and that of Germany and Italy in recent years demonstrates that, with strict regulation of the capital market and prices, inflationary policies can be followed for a long time before a crash occurs.

Although Japan may in theory be able to withstand economic isolation for quite some time, some authorities consider the country's social fabric so weak that it would soon break down under pressure. Poverty and discontent among the Japanese masses are believed so great that the additional misery inflicted by economic sanctions might easily provoke a revolution.[40] It is true that most Japanese peasants and industrial workers eke out a miserable existence. Their lot has apparently grown worse rather than better with the increase in production during recent years. Farmers, already burdened by crushing debts, usurious interest rates and high rents, have seen the cost of industrial products soar well in advance of prices obtained for agricultural commodities. Although the increase in employment has raised labor income as a whole, wage rates of factory workers have fallen considerably below 1933 levels. Owing to a longer working week, actual individual earnings were 7.4 per cent higher in May 1937 but, since the cost of living had risen 39 per cent,[41] it is apparent that living standards have been declining steadily. If a boycott of Japanese goods should throw thousands of workers out of employment and affect the livelihood of several million farm families, misery would undoubtedly be intensified. But whether such misery would find expression in revolt is more problematic. Hitherto social discontent has been canalized largely into military fascism, and it will not be difficult, in case of foreign boycotts, to turn the wrath of the people against the foreigner rather than the government. League sanctions against Italy evidently consolidated the Italian people behind Mussolini; and certainly the Japanese people are more, rather than less, patriotic.

All in all it is unlikely that any unofficial boycotts, no matter how well organized, would be effective. They might injure Japan, but not enough to check its present course in China. Interpretation of all the available data leads to the conclusion that economic sanctions concerted by a number of countries might, under certain circumstances, bring Japan to terms. They would need the participation of the United States, the British Empire, the Netherlands and, even if only for moral effect, France and the Soviet Union. The measures adopted would have to include an embargo on all raw material shipments to Japan, and probably a boycott of Japanese goods. Even then they would probably need to be sustained for a period of at least nine months to one year.

The imposition of economic sanctions would entail the danger of military reprisals by Japan. In the Italo-Ethiopian conflict, Italy needed only to threaten naval action against Britain and France to prevent application of the most effective economic measures. In a similar situation, Japan would probably also attempt to intimidate the powers. Only an iron-clad defensive front among the United States, Britain, France and the Soviet Union could convince Japan of the inadvisability of reprisals; and experience demonstrates that such an arrangement is difficult to achieve.

The efficacy of sanctions would also depend on China's ability to hold out against Japan. The unexpectedly rapid collapse of Ethiopian resistance brought about the early abandonment of League measures against Italy. China, if assured some outside assistance, might be able to engage Japan in a war of attrition during which sanctions would have a chance to work. Meanwhile, however, the prolonged efforts to "quarantine" Japan would mean the continuation of a state of international tension which restless European powers might seek to exploit to their own advantage.

38. Cf. *The Oriental Economist*, September 1937, p. 500.

39. Cf. "The Incident and the Financial Outlook," *The Oriental Economist*, September 1937.

40. Cf. Utley, *Japan's Feet of Clay*, cited, p. 26.

41. These percentages were calculated from statistics in current numbers of *The Oriental Economist*.